

SEQUENCE LISTING

<110> BAYER AG

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<170> PatentIn Ver. 2.1

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<212> DNA

<213> Nicotiana tabacum

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<222> (244)..(1566)

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180

aggtaacata aaggaaagac aaaaacttgg gaattgtttt agaccaccga ggtttcttgt  
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288

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336

Glu Val Ser Asn Gly Thr Gly Leu Leu Asp Ser Val Arg Glu Gly Asn  
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384

Arg Val Phe Val Ser Ser Arg Phe Leu Ala Arg Asp Arg Asn Leu Met  
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Trp Asn Gly Arg Ile Lys Lys Gly Gly Arg Gln Arg Trp Asn Phe Gly  
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0347031.050201

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 115 120 125  
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 Phe Met Lys Lys Gln Ile Gln Arg Ala Arg Lys Phe Phe Asp Glu Ser  
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Leu Leu Thr Leu Pro Ile Ala Tyr Ala Lys Ser Leu Val Pro Pro Asn  
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1586

Arg Thr Ser Ser Pro Leu Ala Lys Thr  
435 440

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<213> Nicotiana tabacum

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35 40 45

Asn Gly Arg Ile Lys Lys Gly Gly Arg Gln Arg Trp Asn Phe Gly Ser  
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Leu Ile Ala Asp Pro Arg Tyr Ser Cys Leu Gly Gly Ser Arg Thr Glu  
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Lys Gly Ser Thr Phe Ser Val Gln Ser Ser Leu Val Ala Ser Pro Ala  
85 90 95

Gly Glu Met Thr Val Ser Ser Glu Lys Lys Val Tyr Asp Val Val Leu  
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Lys Gln Ala Ala Leu Val Lys Arg Gln Leu Arg Ser Thr Asp Asp Leu  
115 120 125

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130 135 140

Glu Ala Tyr Asp Arg Cys Gly Glu Val Cys Ala Glu Tyr Ala Lys Thr

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Arg Leu Glu Asp Ile Phe Ser Gly Arg Pro Phe Asp Met Leu Asp Ala						
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 497  
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 Gly Ser Val Arg Ser Ala Met Val Ala Thr Pro Ala Gly Glu Met Ala  
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 Thr Met Thr Ser Glu Gln Met Val Tyr Asp Val Val Leu Lys Gln Ala  
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 641  
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689

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gat agg tgt agt gaa gta tgt gca gag tat gca aag aca ttt tac tth  
737

Asp Arg Cys Ser Glu Val Cys Ala Glu Tyr Ala Lys Thr Phe Tyr Xaa  
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gga acc atg yta atg act cca gag aga aga agg gct att tgg gca ata  
785

Gly Thr Met Xaa Met Thr Pro Glu Arg Arg Arg Ala Ile Trp Ala Ile  
140 145 150

tat gtg tgg tgc agg aga aca gat gaa ctt gtt gat ggc cca aac gca  
833

Tyr Val Trp Cys Arg Arg Thr Asp Glu Leu Val Asp Gly Pro Asn Ala  
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881

Ser His Ile Thr Pro Gln Ala Leu Asp Arg Trp Glu Asp Arg Leu Glu  
170 175 180

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929

Asp Val Phe Ser Gly Arg Pro Phe Asp Met Leu Asp Ala Ala Leu Ser  
185 190 195

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977

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200 205 210 215

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1025

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220 225 230

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1073

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1121

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ata ttt gct gga aaa gtg act gat aag tgg aga agc ttt atg aag aag  
1313

Ile Phe Ala Gly Lys Val Thr Asp Lys Trp Arg Ser Phe Met Lys Lys  
315 320 325

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1361

Gln Ile Gln Arg Ala Arg Lys Phe Phe Asp Glu Ala Glu Glu Gly Val  
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Pro Ile Ala Tyr Ala Lys Ser Leu Val Pro Pro Thr Arg Thr Leu Val  
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Asp Ala Arg Arg Gly Arg Val Tyr Leu Pro Gln Asp Glu Leu Ala Gln  
290 295 300

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Trp Arg Ser Phe Met Lys Lys Gln Ile Gln Arg Ala Arg Lys Phe Phe  
325 330 335

Asp Glu Ala Glu Glu Gly Val Thr Gln Leu Ser Ser Ala Ser Arg Trp  
340 345 350

Pro Val Trp Ala Ser Leu Leu Leu Tyr Arg Gln Ile Leu Asp Glu Ile  
355 360 365

Glu Ala Asn Asp Tyr Asn Asn Phe Thr Lys Arg Ala Tyr Val Ser Lys  
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180

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230

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278

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326

Val Phe Arg Gly Pro Arg Leu Ser Asn Arg Phe Val Thr Arg Lys Ser

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374

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422

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65 70 75

aag ctg aaa gta gct att att gga gct ggg ctt gca ggc atg tca act  
470

Lys Leu Lys Val Ala Ile Ile Gly Ala Gly Leu Ala Gly Met Ser Thr  
80 85 90

gct gtg gag ctc ttg gat caa gga cat gag gtg gat ata tat gaa tca  
518

Ala Val Glu Leu Leu Asp Gln Gly His Glu Val Asp Ile Tyr Glu Ser  
95 100 105 110

agg cct ttt att ggt ggg aaa gtg gga tct ttt gtt gat aga cgt gga  
566

Arg Pro Phe Ile Gly Gly Lys Val Gly Ser Phe Val Asp Arg Arg Gly  
115 120 125

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614

Asn His Ile Glu Met Gly Leu His Val Phe Phe Gly Cys Tyr Asn Asn  
130 135 140

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662

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160 165 170

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758

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806

Phe Leu Ser Thr Asn Gln Leu Lys Ile Tyr Asp Lys Ala Arg Asn Ala  
195 200 205

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854

Val Ala Leu Ala Leu Ser Pro Val Val Arg Ala Leu Val Asp Pro Asp  
210 215 220

ggc gcg ttg cag cag ata cgt gat cta gat agt gta agc ttt tca gag  
902

Gly Ala Leu Gln Gln Ile Arg Asp Leu Asp Ser Val Ser Phe Ser Glu  
225 230 235

tgg ttt atg tct aaa ggt ggg acg cgt gct agc atc cag agg atg tgg  
950

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240 245 250

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1046

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1094

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1142

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305 310 315

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1190

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1238

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1286

Val Lys Ala Asp Ala Tyr Val Ala Ala Cys Asp Val Pro Gly Ile Lys  
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Arg Leu Val Pro Gln Lys Trp Arg Glu Leu Glu Phe Phe Asp Asn Ile  
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1382

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1430

Gly Trp Val Thr Glu Leu Gln Asp Leu Glu Arg Ser Arg Gln Leu Lys  
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cgc gct aca ggt ttg gac aat ctc ctg tat aca cca gat gca gat ttc  
1478

Arg Ala Thr Gly Leu Asp Asn Leu Leu Tyr Thr Pro Asp Ala Asp Phe  
415 420 425 430

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Ser Cys Phe Ala Asp Leu Ala Leu Ala Ser Pro Glu Asp Tyr Tyr Ile  
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1574

Glu Gly Gln Gly Ser Leu Leu Gln Cys Val Leu Thr Pro Gly Asp Pro  
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1622

Tyr Met Pro Leu Leu Asn Asp Glu Ile Ile Lys Arg Val Ser Lys Gln  
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Val Leu Ala Leu Phe Pro Ser Ser Gln Gly Leu Glu Val Thr Trp Ser  
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1718

Ser Val Val Lys Ile Gly Gln Ser Leu Tyr Arg Glu Gly Pro Gly Lys  
495 500 505 510

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1766

Asp Pro Phe Arg Pro Asp Gln Lys Thr Pro Val Glu Asn Phe Phe Leu  
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Lys Leu Val Val Leu Arg Lys Lys Ile Ala Ala Ala Glu Ser Asn Glu  
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1955

Ile Ser Glu Gly Val Ser Val Ser Asp Glu Leu Ser Leu Val  
575 580 585

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2075

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Arg Ala Asp Leu Asp Ser Met Val Ser Asp Met Ser Thr Asn Ala Pro  
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Lys Gly Leu Phe Pro Pro Glu Pro Glu His Tyr Arg Gly Pro Lys Leu  
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Glu Leu Leu Asp Gln Gly His Glu Val Asp Ile Tyr Glu Ser Arg Pro  
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Phe Ile Gly Gly Lys Val Gly Ser Phe Val Asp Arg Arg Gly Asn His  
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 Arg Leu Leu Lys Lys Val Gly Ala Glu Lys Asn Leu Leu Val Lys Asp  
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 His Thr His Thr Phe Val Asn Lys Gly Gly Glu Ile Gly Glu Leu Asp  
 165 170 175  
 Phe Arg Phe Pro Val Gly Ala Pro Leu His Gly Ile Asn Ala Phe Leu  
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 Ser Thr Asn Gln Leu Lys Ile Tyr Asp Lys Ala Arg Asn Ala Val Ala  
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 Met Ser Lys Gly Gly Thr Arg Ala Ser Ile Gln Arg Met Trp Asp Pro  
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 260 265 270  
 Cys Met Leu Thr Ile Phe Ala Leu Phe Ala Thr Lys Thr Glu Ala Ser  
 275 280 285  
 Leu Leu Arg Met Leu Lys Gly Ser Pro Asp Val Tyr Leu Ser Gly Pro  
 290 295 300  
 Ile Lys Lys Tyr Ile Leu Asp Lys Gly Gly Arg Phe His Met Arg Trp  
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 Gly Cys Arg Gln Val Leu Tyr Glu Thr Ser Ser Asp Gly Ser Met Tyr  
 325 330 335  
 Val Ser Gly Leu Ala Met Ser Lys Ala Thr Gln Lys Lys Val Val Lys  
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 Ala Asp Ala Tyr Val Ala Ala Cys Asp Val Pro Gly Ile Lys Arg Leu  
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 Val Pro Gln Lys Trp Arg Glu Leu Glu Phe Phe Asp Asn Ile Tyr Lys  
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 Thr Gly Leu Asp Asn Leu Leu Tyr Thr Pro Asp Ala Asp Phe Ser Cys  
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Gln Gly Ser Leu Leu Gln Cys Val Leu Thr Pro Gly Asp Pro Tyr Met		
450	455	460
Pro Leu Leu Asn Asp Glu Ile Ile Lys Arg Val Ser Lys Gln Val Leu		
465	470	475
Ala Leu Phe Pro Ser Ser Gln Gly Leu Glu Val Thr Trp Ser Ser Val		
485	490	495
Val Lys Ile Gly Gln Ser Leu Tyr Arg Glu Gly Pro Gly Lys Asp Pro		
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Phe Arg Pro Asp Gln Lys Thr Pro Val Glu Asn Phe Phe Leu Ala Gly		
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Ser Tyr Thr Lys Gln Asp Tyr Ile Asp Ser Met Glu Gly Ala Thr Leu		
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Ser Gly Arg Gln Ala Ser Ala Tyr Val Cys Asp Ala Gly Glu Lys Leu		
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